

Total Network Solutions Brings **Converged** Network to Isle of Man Hospital

Executive Summary

Background

The country of The Isle of Man, a self-governing territory of the British Crown, was building a new large, modern hospital. The government originally planned to stay with its traditional PBX communications solution. But, recognizing that converged networks are the way of the future, decided to invest in moving forward with IP telephony.

Issue

In order to embark on a convergence road map for the Isle of Man government, the new Cisco IP telephony system had to integrate with the legacy PBX system. This integration between old and new world technologies meant utilizing DPNSS technology, proprietary to the UK, and having the capability to convert it back to the IP world.

Solution

Total Network Solutions deployed a hybrid solution of Cisco IP telephony that would provide a converged network, as well as integrate with the government's existing PBX system.

Results

The Isle of Man government is now on a three-year plan to migrate entirely from its PBX system to the Cisco CallManager system. The government is already seeing how it will experience the benefits of enhanced productivity, reduced cost of ownership, and reduced on-going costs.

In the heart of the British Isles, located in the Irish Sea, is the Isle of Man.

The island, just 13 miles wide by 33 miles long, is home to more than 76,000 citizens. The country is a member of the British Commonwealth, an internally self-governing dependent territory of the British Crown, but is its own country and not part of the United Kingdom. Therefore, it makes its own laws and oversees all internal administration, fiscal and social policies.

One of the charters of the Isle of Man government is the construction and opening of a new hospital. Cisco Gold partner Total Network Solutions, which holds specializations in IP Telephony, VPN Security, Wireless and WAN Switching, recommended a hybrid solution of Cisco IP telephony that would provide a converged network as well as integrate with an existing PBX system from Mitel. Headquartered in the UK, Total Network Solutions has built a strong reputation for core network expertise in a complex voice and data environment and specializes in the vertical areas of education, finance and local governments.

Strategic Review Timely for New Hospital

It was this focus on local government that brought Total Network Solutions together with the Isle of Man government.

The information systems division for the Isle of Man government was directing a strategic network review, and it proved timely: The island's existing hospital was shutting down and a new large and modern hospital would take its place. "The needs of the new hospital gave us a chance to integrate our legacy PBX system with an IPT solution and embark upon the convergence road map," said Nigel Thomas, technical manager for the government's information systems division.

Originally, the government planned to continue with its PBX solution from Mitel, but left the tender, or RFP, wide open to other solutions. In the end, it chose Total Network Solutions for several reasons: The company had upgraded the government's entire WAN infrastructure to Cisco a couple of years earlier, then upgraded the LAN infrastructure with Cisco as well. Total Network Solutions encouraged the government to explore IP telephony as a generic concept.



“Total Network Solutions was in a favorable position because of our good relationship with them from previous contracts,” notes Thomas. “But the Cisco solution was cost-effective and the fact that Total Network Solutions was a Cisco partner and holds IPT specialization from Cisco was very important. The appropriate accreditation was critical for this hospital project.”

Total Network Solutions Builds Focus on Emerging Technologies for Vertical Markets

“Much of our focus has been driven by our relationship with Cisco,” notes Darren Martin, director of sales for Total Network Solutions (Isle of Man). “Eight or nine years ago, Cisco was in its infancy in the UK as a channel developer partner. We have evolved as Cisco has evolved. To stay competitive and show differentiation and value, you must keep your skills and your people at the very edge of technology.”

Total Network Solutions had successfully completed a previous IPT project at a hospital, and while not as large as the new hospital project for the Isle of Man, this experience demonstrated a credible track record, and gave the company the ability to highlight at a very early stage where some of the challenges lay in deploying an IPT solution at a health-care facility. “Our experience in technology and health-care gave us the confidence to put forward a solution that was unique and leading edge,” says Martin.

Government Pushes Forward with Converged Network

The Isle of Man government knew that Mitel alone couldn't provide a full solution. A combination of factors convinced the government that a Cisco IP solution was ideal. Its LAN and WAN having been rebuilt by Total Network Solutions was now nearly all Cisco hardware, which opened the way for converged technology.

“From an objective partner perspective, Total Network Solutions has the exposure and experience with voice-related telephony solutions,” says Thomas.

“We knew the pitfalls and some of the downsides of the competitive solutions we were faced with,” says Martin. “Ultimately, we believe in the Cisco story and the validity of Cisco Call Manager as a credible solution. We knew that we could propose it with great confidence without risking the very important relationship that we had built with the Isle of Man government.”

“The Isle of Man is quite different from the UK and the U.S. in that we have very limited choices,” says Thomas. “We decided that in our environment, Cisco was the only viable solution for voice and data. With the LAN and WAN work that Total Network Solutions completed for us earlier, the infrastructure was in place for a converged network solution.” As with any organization, the decision to go with a converged, versus traditional PBX, solution was a critical one. “Total Network Solutions advised us that a converged network was the way forward and we didn't really want to spend a huge amount of money on a PBX system, and then down the road wished we had really moved forward with IP,” notes Thomas. “It goes beyond voice and data convergence to wireless, security, content delivery—all these things play a major part in the strategy for a connected government.”

Once the government committed to the Total Network Solutions/Cisco solution, Total Network Solutions arranged for the teams to visit a UK hospital in York to see a successful Cisco IPT solution at work in a similar environment. Total Network Solutions also pulled together all of the major partners for the project to coordinate everyone's roles and facilitate good working relationships and effective project management. “This was critical,” says Martin. “There were a number of third parties involved, including companies providing a centralized operator console, DPNSS gateways, and voice recording solution. Communication throughout is key to the success of a deployment like this.”



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Integration Between Old and New World Technologies

As with any deployment, Total Network Solutions and the Isle of Man government faced challenges. For this particular deployment, the integration of legacy and other non Cisco systems with Cisco end-to-end convergence solution tested the teams.

“Each manufacturer has idiosyncrasies with their products—they like to keep things proprietary rather than open as Cisco likes to,” says Martin. “Integration between old and new world technologies is always one of the most interesting challenges.” In this particular deployment, utilizing DPNSS technology, proprietary to the UK, and having the capability to convert it back to the IP world is what differentiated Total Network Solutions from the competition.

“We conducted proof-of-concept testing at our labs and invited the government to try and break the system so we could prove its resilience,” says Martin. “This gave them great confidence in the system.” The groups were on a very tight schedule and Total Network Solutions went into great detail in its planning.

“The devil is in the details,” says Martin. “To be successful in this space you must make sure that your people are suitably trained and that you have strong relationships with all your third-party or eco partners.”

Thomas at the Isle of Man concurs. “The key to success is project management and the level of detail you put in, and the experienced people that keep everything pulled together,” he says. “The government has a three-year plan to migrate entirely from Mitel SX-2000 PAXB to the Cisco CallManager system. By leveraging this technology, we’ve already seen new solutions and will experience the benefits of enhanced productivity, reduced cost of ownership, and reduced ongoing costs. We are excited about the prospect of what this technology will bring to us in the future.”



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